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REMARKS

Claims 14-42 are pending in the present application. Reconsideration is respectfully requested for the following reasons.

In the Office Action, a number of claims have been objected to as being substantial duplicates of other claims. While it is difficult to determine which claims are being objected to in the Office Action, Applicant submits that none of the dependent claims are substantially duplicates of other claims. Notably, claim 16 depends from claims 14 and 15, and claim 21 depends from only claim 14. Accordingly, claims 16 and 21 are significantly different. The remaining dependent claims in the Office Action also depend from different claims. Accordingly, Applicant respectfully requests withdrawal of the objection to the claims.

Claims 14, 31 and 32 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. While Applicant submits that use of "the body" in claims 14 and 31 is clearly definite as one skilled in the art would know that the body refers to the at least one movable sealing body as referenced earlier in the claim, Applicant has amended claims 14 and 31 to state that the body is the at least one movable sealing body. Applicant has also changed "the additional chamber" to "the at least another chamber" in claim 32. Accordingly, Applicant submits that all pending claims are now definite and the rejection of the claims as being indefinite is obviated.

Claims 14-24 and 26-33 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,351,348 to Dupuis. "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of anticipation based upon the prior art. *In re Sun*, 31 U.S.P.Q.2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Applicant respectfully asserts that the Examiner has not yet met his burden of establishing a prima facie case of anticipation with respect to the rejected claims.

Claim 14 defines an air-lock valve comprising a housing having an opening configured to be traversed by a flexible band substrate and at least one moveable sealing body cooperating with a sealing surface of the housing for closing the opening during a closing phase of the air-lock valve, with the band substrate being clamped between the at least one movable sealing body and the sealing surface. The sealing surface surrounds the opening in a frame-like fashion, and the opening is closed vacuum tight by pressing the at least one movable sealing body upon the sealing surface and/or upon the band substrate traversing the opening such that the at least one movable sealing body closes the opening at least through indirect abutting at edges of the sealing surface.

The prior art of record does not disclose the above-noted features of claim 14. Specifically, the Dupuis '348 patent does not disclose an opening that is closed vacuum tight by pressing at least one movable sealing body upon a sealing surface and/or upon a band substrate traversing the opening such that the at least one movable sealing body closes the opening at least through indirect abutting at edges of the sealing surface as claimed in claim 14, along with the remaining features of claim 14. Notably, the Dupuis '348 patent does not disclose any opening that is closed vacuum tight by at least one movable sealing body. The Dupuis '348 patent states that the inert gas leaks through the opening 11 into the vacuum chamber 5. See lines 71-75 of column 4 and lines 1-2 of column 5. Therefore, the seal structure or sealing means 30 of the Dupuis '348 patent does not close any opening vacuum tight. Accordingly, claim 14 is in condition for allowance.

Claims 15-30, 37, 39 and 41 depend from claim 14, and since claim 14 defines patentable subject matter as discussed above, claims 15-30, 37 and 39 define patentable subject matter. Moreover, in regard to claim 26, the prior art of record does not disclose at least one movable sealing body as being a single cylindrical roll configured to close the opening. The Dupuis '348 patent does not disclose any such single cylindrical roll closing an opening. Moreover, in regard to claim 28, the cited art of record does not disclose at least one movable sealing body that is moved between an inactive and a closed position by a separate power source. While the Dupuis '348 patent discloses that the rollers 31 and 32 can be rotated by a

drive mechanism, any such drive mechanism would not move the seal structure or sealing means 30 between an inactive and a closed position. Furthermore, the inert gas source is not a power drive. Moreover, in regard to claim 30, the cited art of record does not disclose at least one movable sealing body that is firmly tightened against a sealing surface with a predetermined bearing load by an accumulator. According to the Office Action, an accumulation of pressure firmly tightens a body against a sealing surface of the Dupuis '348 patent. However, an accumulation of pressure is not an accumulator. Furthermore, in regard to new claim 37, the Dupuis '348 patent does not disclose a sealing surface surrounding an opening that is arcuate and the at least one movable sealing body is a cylindrical roll configured to engage the arcuate sealing surface. The Dupuis '348 patent does not disclose an arcuate surface surrounding an opening or a cylindrical roll configured to engage the arcuate sealing surface. Moreover, in regard to claim 39, the Dupuis '348 patent does not disclose at least one movable sealing body that closes an opening by abutting a sealing surface to wholly overlap the opening. Furthermore, the cited art of record does not disclose the at least one movable sealing body that is spaced from the sealing surface and configured to be spaced from the flexible substrate when in the inactive position as claimed in claim 41. Accordingly, claims 15-30, 37, 39 and 41 are in condition for allowance.

Claim 31 defines a processing plant for traversing band-like substrates comprising at least one evacuable processing chamber and at least another chamber associated with the at least one evacuable processing chamber for unrolling or winding up the band substrate. The chambers are interconnected through an opening through which the band substrate is guided and at least one air-lock valve provided at the opening. The at least one air-lock valve comprises a housing having the opening and at least one moveable sealing body cooperating with a sealing surface of the housing for closing the opening vacuum tight during a closing phase of the air-lock valve, with the band substrate being clamped between the at least one movable sealing body and the sealing surface. The sealing surface surrounds the opening in a frame-like fashion, and the opening is closed by pressing the at least one movable sealing body upon the sealing surface and/or upon the band substrate traversing the opening such that the at

least one movable sealing body closes the opening at least through indirect abutting at edges of the sealing surface.

The prior art of record does not disclose the above-noted features of claim 31. Specifically, the Dupuis '348 patent does not disclose an opening that is closed vacuum tight by pressing at least one movable sealing body upon a sealing surface and/or upon a band substrate traversing the opening such that the at least one movable sealing body closes the opening at least through indirect abutting at edges of the sealing surface as claimed in claim 31, along with the remaining features of claim 31. Notably, the Dupuis '348 patent does not disclose any opening that is closed vacuum tight by at least one movable sealing body. The Dupuis '348 patent states that the inert gas leaks through the opening 11 into the vacuum chamber 5. See lines 71-75 of column 4 and lines 1-2 of column 5. Therefore, the seal structure or sealing means 30 of the Dupuis '348 patent does not close any opening vacuum tight. Accordingly, claim 31 is in condition for allowance.

Claims 31-36, 38, 40 and 42 depend from claim 31, and since claim 31 defines patentable subject matter as discussed above, claims 31-36, 38, 40 and 42 define patentable subject matter. Moreover, in regard to claim 36, the prior art of record does not disclose at least one movable sealing body as being a single cylindrical roll configured to close the opening. The Dupuis '348 patent does not disclose any such single cylindrical roll closing an opening. Moreover, in regard to claim 34, the cited art of record does not disclose at least one movable sealing body that is moved between an inactive and a closed position by a separate power source. While the Dupuis '348 patent discloses that the rollers 31 and 32 can be rotated by a drive mechanism, any such drive mechanism would not move the seal structure or sealing means 30 between an inactive and a closed position. Furthermore, the inert gas source is not a power drive. Moreover, in regard to claim 35, the cited art of record does not disclose at least one movable sealing body that is firmly tightened against a sealing surface with a predetermined bearing load by an accumulator. According to the Office Action, an accumulation of pressure firmly tightens a body against a sealing surface of the Dupuis '348 patent. However, an accumulation of pressure is not an accumulator. Furthermore, in regard

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to new claim 38, the Dupuis '348 patent does not disclose a sealing surface surrounding an opening that is arcuate and the at least one movable sealing body is a cylindrical roll configured to engage the arcuate sealing surface. The Dupuis '348 patent does not disclose an arcuate surface surrounding an opening or a cylindrical roll configured to engage the arcuate sealing surface. Moreover, in regard to claim 40, the Dupuis '348 patent does not disclose at least one movable sealing body that closes an opening by abutting a sealing surface to wholly overlap the opening. Furthermore, the cited art of record does not disclose the at least one movable sealing body that is spaced from the sealing surface and configured to be spaced from the flexible substrate when in the inactive position as claimed in claim 42. Accordingly, claims 31-36, 38, 40 and 42 are in condition for allowance.

Claim 25 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Dupuis '348 patent in view of U.S. Patent No. 3,807,058 to Seminski. Claim 25 depends from claim 14, and since claim 14 defines patentable subject matter as discussed above, claim 25 defines patentable subject matter. Accordingly, claim 25 is in condition for allowance.

All pending claims 14-42 are believed to be in condition for allowance, and a Notice of Allowance is therefore earnestly solicited.

Respectfully submitted,

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Date



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